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摘要: We demonstrate effective implementation of the Fabry-Perot interferometer with subwavelength aperture arrays on its two metal mirrors to achieve polarization-independent narrow band-pass filtering. By superimposing of aperture array fundamental resonance transmission with one of the Fabry-Perot interference peaks, the moderate filter insertion loss of -5 dB, narrow band-pass width of 15 mu m, and efficient out-of-band rejection within the similar to 0.1-3 THz range are reported. The Siemens-star-shaped apertures in arrays play an important role to achieve such polarization independence and small insertion loss. (C) 2012 Elsevier B.V. All rights reserved.
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